

Amendments to the Claims

1. (Currently Amended) A variable frequency oscillator comprising:

an oscillatory circuit for generating a periodic output dependant on the capacitance between a first node and a second node of the circuit, and having a capacitative element connected between the first node and the second node; the capacitative element comprising:

a variable capacitance unit, the capacitance of which is variable for varying the frequency of the output; and

a plurality of trimming capacitances each being selectively connectable ~~in parallel with the~~ to the variable capacitance unit ~~between the first node and the second node~~ to trim the frequency of the output.

a/ 2. (Currently Amended) ~~A variable oscillator as claimed in claim 1~~ The variable frequency oscillator of claim 1, wherein the trimming capacitances are each selectively connectable between the first node and ~~the second~~ an intermediate node, and wherein the variable capacitance unit is connected between the second node and the intermediate node.

3. (Currently Amended) ~~A variable oscillator as claimed in claim 1~~ The variable frequency oscillator of claim 1, wherein the trimming capacitances are each selectively connectable in parallel with each other.

4. (Currently Amended) ~~A variable oscillator as claimed in claim 1~~ The variable frequency oscillator of

claim 1, wherein a switch is connected in series with each trimming capacitance ~~between the first node and the second node~~ for selectively connecting the respective trimming capacitance ~~between the first node and the second node~~ to the variable capacitance unit in response to a respective switching signal.

5. (Currently Amended) ~~A variable oscillator as claimed in claim 4~~ The variable frequency oscillator of claim 4, wherein each switch is a switching transistor.

6. (Currently Amended) ~~A variable oscillator as claimed in claim 4~~ The variable frequency oscillator of claim 4, comprising a control apparatus for causing a set of the trimming capacitances to be connected ~~between the first node and the second node~~ to the variable capacitance unit.

7. (Currently Amended) ~~A variable oscillator as claimed in claim 6~~ The variable frequency oscillator of claim 6, wherein the control apparatus is capable of generating the ~~said~~ switching signals.

8. (Currently Amended) ~~A variable oscillator as claimed in claim 6~~ The variable frequency oscillator of claim 6, comprising a memory coupled to the control apparatus for storing information defining one or more sets of the trimming capacitances.

9. (Currently Amended) ~~A variable oscillator as claimed in claim 8~~ The variable frequency oscillator of claim 8, wherein each of the said one or more sets

corresponds to a respective operating frequency of the oscillator.

10. (Currently Amended) ~~A variable oscillator as claimed in claim 8~~ The variable frequency oscillator of claim 8, wherein the control apparatus is capable of retrieving from the memory information defining a set of the trimming capacitances and causing each of the trimming capacitances within that set of the trimming capacitances to be connected ~~between the first node and the second node~~ to the variable capacitance unit.

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11. (Currently Amended) ~~A variable oscillator as claimed in claim 1~~ The variable frequency oscillator of claim 1, wherein at least one of the trimming capacitances has a different capacitance value from another of the trimming capacitances.

12. (Currently Amended) ~~A variable oscillator as claimed in claim 1~~ The variable frequency oscillator of claim 1, wherein the capacitance of the variable capacitance unit is variable by means of ~~the~~ a voltage applied to a variable capacitance input.

13. (Currently Amended) ~~A variable oscillator as claimed in claim 12~~ The variable frequency oscillator of claim 12, comprising feedback apparatus connected between the output and the variable capacitance input for stabilising the oscillator.

14. (Currently Amended) ~~A variable oscillator as claimed in claim 13~~ The variable frequency oscillator of

claim 13, wherein the feedback apparatus is a phase-locked loop.

15. (Currently Amended) ~~A variable oscillator as claimed in claim 1~~ The variable frequency oscillator of claim 1, wherein the variable capacitance unit is a variable capacitance diode.

16. (Original) A radio terminal comprising a variable oscillator as claimed in claim 1.

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17. (Currently Amended) A method for operating a variable frequency oscillator as claimed in claim ~~12~~ 8, the method comprising:

retrieving from the memory information defining a set of the trimming capacitances;

connecting that set of the trimming capacitances ~~between the first node and the second node~~ to the variable capacitance unit;

comparing the voltage at ~~the~~ a variable capacitance input with a first preset voltage range; and

if that voltage is outside the first preset voltage range determining, based on the voltage at the variable capacitance input, an adjusted set of the trimming capacitances and storing in the memory information defining that adjusted set of the trimming capacitances.

18. (Currently Amended) A The ~~method as claimed in~~ of claim 17, wherein the ~~said~~ step of determining is performed only if the voltage at the variable capacitance input is inside a second preset voltage range.

a¹ 19. (Currently Amended) A The method ~~as claimed in~~ of claim 17, wherein, in the step of storing, the information defining the adjusted set of the trimming capacitances is stored so as to replace in the memory the said information defining a set of the trimming capacitances.

20-38. (Cancelled)

a² 39. (New) The variable frequency oscillator of claim 1, wherein the trimming capacitances are each selectively connectable in series with each other.